

WHAT IS CLAIMED IS:

Sub A1

1 A polyurethane elastomer prepared from a composition comprising
5 a) at least one higher molecular weight polyhydroxyl compound having
an average molecular weight of from 500 to 6,000 and a functionality
of at least 2,
10 b) 2,3,5,6-tetramethyl-1,4-diisocyanatobenzene and
c) at least one low molecular weight chain-lengthening and/or
crosslinking agent having at least two hydroxyl groups and an average
molecular weight of from 18 to 800.

15 2. A process for the production of the polyurethane elastomer of Claim 1 in
which the higher molecular weight polyhydroxyl compound a) is first reacted
with the diisocyanate b) to produce an isocyanate-terminated prepolymer and
the prepolymer is then reacted with the chain-lengthening and/or crosslinking
agents and/or higher molecular weight polyhydroxy compounds.
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3. The process of Claim 2 in which a chain lengthening agent and/or
crosslinking agent c) is present during production of the prepolymer.

25 4. A shaped article capable of ~~withstanding~~ high mechanical stress produced
from the polyurethane elastomer of Claim 1.

*A₁ C₂
B₂*

*A₁ C₂
C₅*

Add. D₁

(3)